

REMARKS

The indication of allowable subject matter in Claim 7 is acknowledged with appreciation. By this amendment, new claim 11 has been added. Support for claim 11 can be found in paragraphs 13 and 14 of the specification. The specification has been amended to properly display a special character. The character is properly displayed in the parent application, which has been incorporated by reference hereto. Claims 1-11 are pending for further examination.

The rejection of Claims 1-6 and 8-10 under 35 U.S.C. § 103(a) over Sommerfeld et al., US 5,886,101 is respectfully traversed.

The invention relates to photochromic plastic objects and methods of forming photochromic plastic objects composed of at least two interpenetrating polymer networks and at least one photochromic dye homogeneously distributed therein. Sommerfeld discloses a material comprising two interpenetrating polymer networks, but does not disclose or suggest that a photochromic dye is distributed homogeneously throughout the interpenetrating networks.

Mass dyeing techniques comprise adding photochromic dyes to casting resin mixtures prior to polymerization (see paragraph 3 of the instant specification). While mass dyeing is known, it would not have been obvious to combine a mass dyeing technique with the compositions of Sommerfeld as alleged in paragraph 4 of the Office Action. Moreover, even assuming *arguendo* that a mass dyeing process were combined with the compositions of Sommerfeld, there would not have been an expectation of successfully producing the claimed photochromic synthetic resins.

In the interpenetrating polymer networks disclosed by Sommerfeld, at least one of the polymer networks is **required** to be formed by polymerization in a solvent (see abstract and summary of the invention). The incorporation of a mass dyeing technique to the method of Sommerfeld would **not** result in the homogeneous distribution of the dye with the polymer networks because the dye would remain dissolved in the solvents.

Submitted herewith is a Declaration under 37 C.F.R. § 1.132 of Jobst La Dous which sets forth facts establishing that because at least one of the polymer networks of Sommerfeld is **required** to be formed by polymerization in a solvent, it would not have been obvious to combine a mass dyeing technique with Sommerfeld and such a combination, if undertaken, would not result in the homogeneous distribution of dye in the interpenetrating polymer network. The Declaration further sets forth facts establishing that photochromic synthetic resins made according to the invention have enhanced photochromic kinetics with respect to comparative resins.

With respect to Claims 4-6, at page 3 the Office Action alleges that Example 7 of Sommerfeld teaches that "the first polyurethane network is formed without an initiator." This is incorrect. The first network in Example 7 is formed using the cure catalyst (i.e., initiator) dibutyltin dilaurate. Accordingly, reconsideration and withdrawal of the rejection are respectfully requested.


In view of the foregoing, the application is respectfully submitted to be in condition for allowance, and prompt favorable action thereon is solicited.

If there are any questions regarding this amendment or the application in general, a telephone call to the undersigned at (202) 624-2845 would be appreciated since this should expedite the prosecution of the application.

If necessary to effect a timely response, this paper should be considered as a petition for an Extension of Time sufficient to effect a timely response, and please charge any deficiency in fees or credit any overpayments to Deposit Account No. 05-1323 (Docket #100341.52572US).

Respectfully submitted,

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